

REMARKS

Claims 1-11 are pending. Reconsideration is respectfully requested in light of the remarks below.

The Examiner will note that, in accordance with his comments, the as-filed Abstract has been replaced with a shorter Abstract. A minor amendment has also been to the specification to correct a typographical error. No new matter has been added.

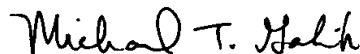
Turning now to the art rejections, claims 1-11 have been rejected under 35 U.S.C. § 103(a) based on JP 11-149278 (*Shingo*). *Shingo* is directed to a liquid crystal driver that is capable of changing between a 4 gradation display and a binary display. Paragraphs [0034] – [0038] in the machine translation of *Shingo* discuss the decoder, 4 gradation display operation and binary display operation. However, nowhere does *Shingo* disclose nor teach the interrelated specific first and second modes of operation including the relationship between voltage output frequency in a given mode and its corresponding display gradient, as recited in each of independent claims 1 and 8.

As recited in these claims, the two modes provide different display gradients, each precisely defined by device-related variables. The first mode provides $2^A = 2^{(N/L)}$ display gradients for each L pixels on each of the segment electrodes, where N is the number of bits in the display data, L is the number of common electrode simultaneously selected by the scanning signal, and N/L denotes the number of bits in each data unit. The second mode provides $2^B = 2^{(N/L)(1/n)}$ display gradients for each of $n \times L$ pixels on each of the segment electrodes. In the first mode, a selected one of the sub-decoders outputs a voltage in each of A divided periods in one horizontal scanning period. In the second mode, a selected one of the sub-decoders outputs a voltage every n horizontal scanning periods. This arrangement wherein multiple display modes are interrelated and the frequency of the voltage output in a given mode is related to its corresponding display gradient as shown above advantageously provides the claimed display driver with more versatility and general applicability than that of prior display drivers including the one shown in *Shingo*.

Accordingly, it is respectfully submitted that each of the independent claims 1 and 8 is patentably distinguishable over *Shingo*. It is further submitted that each of the remaining dependent claims is patentable for at least the same reasons as its independent claim.

In view of the foregoing amendments and remarks, Applicants respectfully request favorable reconsideration of the present application.

Respectfully submitted,


Michael T. Gabrik
Registration No. 32,896

Please address all correspondence to:

Epson Research and Development, Inc.
Intellectual Property Department
150 River Oaks Parkway, Suite 225
San Jose, CA 95134
Phone: (408) 952-6000
Facsimile: (408) 954-9058
Customer No. 20178

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